

REMARKS

Claims 1-42 of the patent application were presented for examination. In the Office Action of July 3, 2007, claims 1-42 were rejected. Claims 1, 13, 25, 32, 37 and 40 have been amended, as listed above. Claims 2-3, 5, 7, 14-15, 17 and 19 have been cancelled. No new matter has been added. Accordingly, claims 1, 4, 6, 8-13, 16, 18, 20-42 are now pending for examination.

The present claim amendments and claim cancellations are solely for facilitating expeditious prosecution of the present application. Thus, Applicant is not conceding that the subject matter encompassed by the claims as previously presented is not patentable over art cited by the Examiner. Applicant reserves the right to pursue claims directed to the subject matter encompassed by the claims as previously presented and any additional claims in one or more continuing and/or divisional applications.

The Applicant appreciates and acknowledges Examiner's granting of an interview regarding this application on June 24, 2008. Per our discussion, the limitations of Claims 2, 3, 5, and 7 were incorporated into Claim 1, and the limitations of Claims 14, 15, 17 and 19 were incorporated into Claims 13, 25, 32, 37, and 40 to clarify the present invention and move to allowance. Applicant respectfully requests reconsideration of the pending claims and responds to the Office Action as follows.

Rejections Under 35 USC § 112

In paragraph 2, claims 1, 13 and 25 were rejected under 35 U.S.C. § 112(1) as a single means claim. However, none of the claims contain a single means claims. For the purpose of advancing prosecution, all single element independent claims have been amended to contain multiple elements. Thus, Applicant respectfully traverses the rejections.

In paragraph 3, claims 1-42 were rejected under 35 U.S.C. § 112(2), as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The assertion is that the phrase

“substantially equal” in the phrase “a number of servers assigned to each of the plurality of switches is substantially equal” was not clear. Applicant respectfully disagrees.

A number of servers associated with a switch module is expressed as a whole number rather than a fraction which can have infinite expressions. In the case of an odd number of total servers, such as 5 servers, 3 servers can be associated with one switch module while 2 servers are associated with another switch. The allocation is not exactly equal, but is substantially equal given the circumstances. Thus, the phrase “substantially equal” distinctly claims the subject matter and the objection is respectfully obviated.

Rejections Under 35 USC § 101

In paragraph 6, claims 13-24 and 40-42 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter as being directed to software that is not implemented on a computer-readable storage medium. However, independent claims 13 and 40 are directed to a “computer readable medium containing program instructions.” Therefore, Applicant believes that the rejection was asserted in error.

Rejections Under 35 USC § 102

In paragraph 8 of the Office Action, claims 1-42 were rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent No. 7,213,065 issued to Watt (“Watt”). Applicant respectfully traverses the rejections. In summary, while the claims provide load balancing for remote boot processes, the Watt reference only discloses load balancing handled by an administrator without regard to remote boot processes.

Independent claim 1 is representative of independent claims 13, 25, 32 and 40. Claim 1 is directed to a method for load balancing a remote booting process for a plurality of switch modules in a server system, the server system including a plurality of servers. The method comprises:

A method for load balancing a remote booting process for a plurality of switch modules in a server system, the server system including a plurality of servers, the method comprising:

- a) assigning each of the plurality of servers to a switch module of the plurality of switch modules, such that a number of servers assigned to each of the plurality of switch modules is substantially equal, a server accessing the switch module during a remote boot;

- a') storing a switch assignment; and

- (a1) determining whether a server must be assigned to a switch module by examining the server's non-volatile storage.

- (a2) accessing a switch assignment table to determine which of the plurality of switch modules to assign to the server if the server must be assigned; and

- wherein the accessing step comprises (a2i) utilizing the switch assignment table to evaluate a present load distribution across the plurality of switch modules, and (a2ii) assigning the server to the next switch module if the number of servers assigned to a current switch module is greater than the number of servers assigned to a next switch module.

- b) storing for each server a switch assignment in the server's non-volatile storage, wherein the switch assignment identifies the assigned switch module;

Advantageously, a switch module is not overloaded in the case of multiple servers performing remote reboot processes at the same time.

In general, Watt discloses a management tool that streamlines the server allocation and provisioning process within a data center (Abstract). Watt further discloses a dynamic server allocation and provisioning system (DSAP 102 in FIG. 1, components 200-210 in FIG. 2). Load manager 206 is part of the DSAP 102 that is responsible for allocating servers based upon rules and policy settings specified by an administrator (6:64-7:7). Load manager 206 has access to information such as resource allocation, utilization, and efficiency (7:8-17).

However, Watt fails to teach or suggest the invention as recited in claim 1. For example, claim 1 recites "assigning...for remote booting...such that a number of servers assigned to each of a plurality of switch modules is

substantially equal.” The balance prevents one switch module from being overloaded when multiple servers perform a remote boot process at the same time. On the other hand, the load manager 206 of Watt merely allocates responsive to the rules and policies of an administrator. Watt fails to provide further details on the policies. Even though Watt refers resource allocation, utilization, and efficiency, the resource allocation is not further detailed. Contrary to claim 1, none of the policies of Watt amounts to assigning servers to a switch module using a remote boot processes as an input for assignments. Likewise, Watts fails to disclose details of a boot process. Nor does Watt describe a relationship between servers, switch modules, and remote boot processes. Thus, Watt fails to teach or disclose at least the assignments related to remote booting as recited in claim 1.

Therefore, Applicant submits that independent claim 1, with the new limitations, and related dependent claims, are patentable over Watt and the other prior art of record. Similarly, independent claims 13, 25, 32 and 40, which has similar limitations and related dependent claims, are patentable for at least the same reasons as claim 1.

CONCLUSION

Applicant’s attorney believes this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant’s attorney at the telephone number indicated below.

Respectfully submitted,

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